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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Attorney Docket No. 300622010300 UTILITY Andreas SCHIRMER First Inventor PATENT APPLICATION DETECTION OF MODULAR POLYKETIDE TRANSMITTAL Title SYNTHASE GENE CLUSTERS (Only for new nonprovisional applications under 37 CFR 1.53(b)) EV 336630315 US Express Mail Label No. MS Patent Application **APPLICATION ELEMENTS** Commissioner for Patents ADDRESS TO: P.O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria, VA 22313-1450 Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original, and a duplicate for fee processing) (2 pages) CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) Applicant claims small entity status. Nucleotide and/or Amino Acid Sequence Submission X See 37 CFR 1.27. (if applicable, all necessary) X Specification [Total Pages 22 Computer Readable Form (CRF) (preferred arrangement set forth below) b. Specification Sequence Listing on: Descriptive title of the invention.

Cross Reference to Related Applications CD-ROM or CD-R (2 copies); or Paper Statement Regarding Fed sponsored R & D Statements verifying identity of above copies Reference to sequence listing a table or a computer program listing appendix **ACCOMPANYING APPLICATION PARTS** Background of the Invention Brief Summary of the Inventior 9. Brief Description of the Drawings (if filed) Assignment Papers (cover sheet & document(s)) **Detailed Description** 37 CFR 3.73(b) Statement Ctaim(s) 10. Abstract of the Disclosure Attomey (when there is an assignee) 11. X Drawing(s) (35 U.S.C. 113) English Translation Document (if applicable) Total Sheets Information Disclosure Copies of IDS 5. Oath or Declaration [Total Sheets 12. Statement (IDS)/PTO-1449 Newly executed (original or copy) 13. **Preliminary Amendment** Copy from a prior application (37 CFR 1.63(d)) Return Receipt Postcard (MPEP 503) 14. (for continuation/divisional with Box 18 completed) (Should be specifically itemized) Certified Copy of Priority Document(s) 15. **DELETION OF INVENTOR(S)** (if foreign priority is claimed) Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). named in the prior application, 16. Applicant must attach form PTO/SB/35 or its equivalent. see 37 CFR 1.63(d)(2) and 1.33(b). 17. Other: 6. X Application Data Sheet. See 37 CFR 1.76 (2 pages) 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Divisional Continuation-in-part (CIP) of prior application No.: Continuation Prior application information: Examiner For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS X Customer Number: 25226 Correspondence address below Name Address Zip Code City State Country Telephone Name (Print/Type) Randolph Ted Apple Registration No. (Attorney/Agent) 36,429 September 30, 2003 Signature I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 336630315 US, in an envelope addressed to: MS Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below. 9/30/03 Dated: Signature: (Randolph Ted Apple)

PTO/SB/17 (08-03)

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| FEE TRANSMITTAL   |   |   |              | nown       |   |                               |                                  |  |
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|   | '   |   |              |            |   | Not Yet Assigned              |                                  |  |
| for FY 2003   |   | -1  |              |            |   | Concurrently Herewith         |                                  |  |
| Effective 01/01/2003, Patent fees are subject to annual revision.   |   | First Named Inventor                        |              |            | -                                       | Andreas SCHIRMER              |                                  |  |
|   |   | Examiner Name                               |              |            | <del>-</del>                            | Not Yet Assigned              |                                  |  |
| X Applicant claims small entity status. See 37 CFR 1.27   |   | Art Unit                                    |              |            |   | Not Yet Assigned              |                                  |  |
| TOTAL AMOUNT OF PAYMENT (\$) 750.00   | Attorney Docket No.                                     |   |              | o.   ;     | 300622010300                            |                               |                                  |  |
| METHOD OF PAYMENT (check all that apply)  | FEE CAL   |   |              |            | CALCUL                                  | ATION (co                     | intinued)                        |  |
| Check Credit Money Other None   | 3. ADDITIONAL FEES                                      |   |              |            |   |                               |                                  |  |
|   |   |   |              |            |   |                               |                                  |  |
| X Deposit Account:  | Larg  | e Entity                                    | Smal         | I Entity   |   |                               |                                  |  |
| Deposit<br>Account 03-1952  | Fee   | Fee   | Fee          | Fee        | -                                       | Fee Desc                      | cription                         |  |
| Number  | Code  | (\$)  | Code         | (\$)       |   |                               | Fee Paid                         |  |
| Account Morrison & Foerster LLP   | 1051  | 130   | 2051         | 65         | _                                       | late filing fe                |                                  |  |
| Name The Director is authorized to: (check all that apply)  | 1052  | 50  | 2052         | 25         | Surcharge -<br>sheet.                   | - late provisi                | onal filing fee or cover         |  |
| X Charge fee(s) indicated below X Credit any overpayments   | 1053  | 130   | 1053         | 130        | Non-English                             | specificatio                  | n i                              |  |
| Charge any additional fee(s) during the pendency of this  | 1812  | 2,520                                       | 1812         | 2,520      | -                                       | •                             | parte reexamination              |  |
| application   | 1804  | · ·   | 1804         | 920*       | -                                       |                               | of SIR prior to                  |  |
| Charge fee(s) indicated below, except for the filing fee  | 1   |   |              |            | Examiner at Requesting                  | ction                         |                                  |  |
| to the above-identified deposit account.  | 1805  |   | 1805         | 1,840*     | Examiner ad                             | ction                         |                                  |  |
| FEE CALCULATION   | 1251  |   | 2251         | 55         |   |                               | n first month                    |  |
| 1. BASIC FILING FEE Large Entity Small Entity   | 1252<br>1253  | 4.  | 2252<br>2253 | 205<br>465 |   |                               | n second month                   |  |
| Fee Fee Fee Fee Fee Description Fee Paid  | 1254  | .   | 2254         |            | ,                                       |                               | n fourth month                   |  |
| Code (\$) Code (\$)<br>1001 750 2001 375 Utility filing fee 375.00  | 1255  |   | 2255         | 985        | Extension fo                            |                               | ' <del>  </del>                  |  |
| 1001 750 2001 375 Utility filing fee 375.00<br>1002 330 2002 165 Design filing fee  | 1401  |   | 2401         | 160        | Notice of Ap                            | · · ·                         |                                  |  |
| 1003 520 2003 260 Plant filing fee  | 1402  |   | 2402         | 160        | Filing a brief                          | • .                           | of an appeal                     |  |
| 1004 750 2004 375 Reissue filing fee  | 1403  | 280   | 2403         | 140        | Request for                             | oral hearing                  |                                  |  |
| 1005 160 2005 80 Provisional filing fee   | 1451  | 1,510                                       | 1451         | 1,510      | Petition to in                          | stitute a put                 | olic use proceeding \            |  |
| SUBTOTAL (1) (\$) 375.00  | 1452  |   | 2452         | 55         |   | evive – unav                  |                                  |  |
|   | 1453  |   | 2453         | 650        |   | evive - uninte                | * •                              |  |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Extra Fee from  | 1501<br>1502  |   | 2501<br>2502 | 650<br>235 | Utility issue<br>Design issue           |                               | ue)                              |  |
| Claims   below / Fee Paid   Total Claims   15   -20** =   0   x   9.00   =   0.00   | 1502  |   | 2502         | 315        | Plant issue                             |                               |                                  |  |
| Total Claims 15 -20" = 0 x 9.00" = 0.00 Independent 2 -3" = 0 x 42.00 = 0.00  | 1460  |   | 1460         | 130        |   | ree<br>the Commis             | sioner                           |  |
| Ctaims 2 3 = 0 x 42.00 = 0.00  Multiple Dependent 140.00 = 0.00   | 1807  | 50  | 1807         | 50         |   |                               | CFR 1.17(g)                      |  |
|   | 1806  |   | 1806         | 180        | •                                       |                               | on Disclosure Stmt               |  |
| Large Entity   Small Entity   Fee   Fee | 8021  |   | 8021         | 40         |   |                               | assignment per                   |  |
| Code (\$) Code (\$)   | 5021  | _+0   | 0021         | 40         |   |                               | of properties) r final rejection |  |
| 1202  | 1809  | 750   | 2809         | 375        | (37 CFR 1.1                             | 129(a))                       |                                  |  |
| 1203 280 2203 140 Multiple dependent claim, if not paid   | 1810  | 750   | 2810         | 375        |   | lditional inve<br>37CFR 1.129 |                                  |  |
| 1204 84 2204 42 ** Reissue independent claims   | 1801  | 750   | 2801         | 375        | Request for Continued Examination (RCE) |                               |                                  |  |
| over original patent  1205 18 2205 9 ** Reissue claims in excess of 20  | 1802  | 900   | 1802         | 900        | Request for<br>of a design              | expedited e<br>application    | xamination                       |  |
| and over original patent  | Other   | Other fee (specify)                         |              |            |   |                               |                                  |  |
| SUBTOTAL (2) (\$) 0.00  | *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (5) 0.00 |   |              |            |   |                               |                                  |  |
| **or number previously paid, if greater, For Reissues, see above  |   |   |              |            |   |                               |                                  |  |
| SUBMITTED BY  |   |   |              |            |   | (Complete                     | (if applicable))                 |  |
| Name (Print/Type) Randolph Ted Apple  |   | Registration No.<br>(Attorney/Agent) 36,429 |              |            | •                                       | Telephone                     | (650) 813-5933                   |  |
| Signature   |   |   |              |            |   | September 30, 2003            |                                  |  |
| September 30, 2003  |   |   |              |            |   |                               |                                  |  |